10/501705

## TENT COOPERATION TREAT

**PCT** 

Recapet/PTO 16 JUL 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT 2 4 MAY 2004

WIPO PCT

(PCT Artcle 36 and Rule 70)

Applicant's or agent's file reference PCT 301	FOR FURTHER ACTION	SeeNotificationofTransmittalofInternationalPreliminar Examination Report (Form PCT/IPEA/416)
International application No. PCT/KR2003/000110	International filing date(day/montal 17 JANUARY 2003 (17.01.2003	
International Patent Classification (IPC IPC7 B60C 11/00	•	· ·
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2. T	his REPOF	OT consists of state of 2 shows including this consists of
ſ		RT consists of a total of sheets, including this cover sheet.
L	amend	report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been ded and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule and Section 607 of the Administrative Instructions under the PCT).
	These anne	xes consist of a total ofsheets.
3. T	his report	contains indications relating to the following items:
	ıΧ	Basis of the report
	п	Priority
	ш	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
	IV 🗌	Lack of unity of invention
	v X	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
•	VI 🕒	Certain documents cited
	VII 🗍	Certain defects in the international application
	VIII 🗍	Certain observations on the international application

06 MAY 2004 (06.05.2004)
Authorized officer
SON, Yong Ook
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ternational aplication No. INTERNATIONAL PRELIMINARY EXAMINATION REPORT PCT/KR2003/000110 I. Basis of the report With regard to the elements of the international application:\* the international application as originally filed the description: , as originally filed pages , filed with the demand pages , filed with the letter of pages the claims: , as originally filed pages , as amended (together with any statment) under Article 19 pages \_ , filed with the demand pages \_\_\_\_, filed with the letter of pages the drawings: , as originally filed pages . \_\_ , filed with the demand pages \_\_\_\_\_, filed with the letter of pages . the sequence listing part of the description: , as originally filed \_\_\_\_, filed with the demand pages \_ filed with the letter of pages \_ With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language English which is the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/ or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.
filed together with the international application in compa

 ${\bf med}$  together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form

The statement that the subsequently furnished written sequence listing does not go beyond the disc losure in the international applicationas as filed has been furinshed.

The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

The amendments have resulted in the cancellation of:

the description, pages	
the claims, Nos.	
the drawings sheet	

This report has been established as if (some of) the amendments had not been made, since they have been considered to

go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).\*\*

Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

5.



ternational aplication No.
PCT/KR2003/000110

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.	Statement	•		•
	Novelty (N)	Claims	2	YES
	, ,	Claims	1, 3-5	NO
	Inventive step (IS)	Claims		YES
	()	Claims	1-5	NO
	Industrial applicability (IA)	Claims	1-5	YES
	,	Claims		N0

- 2. Citations and explanations (Rule 70.7)
  - A. Concerning the documents referred to in this report:

D1: KR 2000-20302 A

D2: WO 99 43505 A1 (patent family member of KR 2001-41285 A cited in the International Search Report)

\*\*\*\*\*\* New Citations (cited in D2) \*\*\*\*\*\*

D3: EP 0658452 A1 (see the abstract)
D4: US 5227425 A (see the abstract)

B. Concerning Novelty - Art. 33(1) and (2) PCT:

Claims 1 and 3-5 lack novelty over D1 for the following reasons:

D1 relates to an electrically conductive tyre provided with a tyre tread made of a non-conductive rubber composition containing silica, comprising holes filled with a conductive rubber composition containing carbon black. The holes pass through a cap tread and come in contact with a under tread having sufficient electric conductivity to enable the electrostatic charge stored by a vehicle on running to be discharged to the ground. In addition, D1 refers to the shape of holes. (D3 also discloses the electrically conductive tyre which is disclosed in D1.)

C. Concerning Inventive Step - Art. 33(1) and (2) PCT:

Claim 2 lacks an inventive step over D1 and D4 for the following reasons:

The essential feature of claim 2 appears to be that a tyre tread is formed of a rubber composition containing silica at the amount of more than 50 PHR. D4 discloses that a tyre tread is formed of a rubber composition containing silica (main reinforcement filler) at the amount of 30 to 150 PHR.

D1 and D4 do not individually disclose all the features of the claim, but when combined, they disclose all the features of the claim. Consequently, it would be obvious to a person skilled in the art to arrive at the claim by using the teachings of D1 and D4.

D. Concerning Industrial Applicability - Art. 33(1) and (3) PCT:

All claims are considered to be industrially applicable.